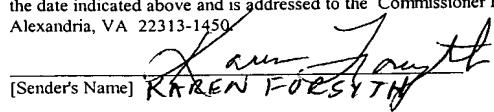


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KAREN FORSYTH

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF : Richard H. Bruce, et al.
FOR : APPARATUS AND METHOD FOR
DETECTING AND LOCATING RARE CELLS
SERIAL NO. : Unknown
FILED : Herewith
EXAMINER : Unknown
ART UNIT : Unknown
LAST OFFICE ACTION : N/A
ATTORNEY DOCKET NO. : D/A2247I
XERZ 200563-3

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In accordance with 37 C.F.R. §§ 1.56, 1.97, 1.98 and MPEP § 609, applicant(s) submit(s) the following Disclosure Statement concerning art of which the applicant(s) is(are) aware. A copy of PTO-1449 is enclosed herewith.

Under § 1.98(a)(3), no concise explanation of relevance is required for information that is in the English language. Accordingly, the enclosed patents require no further explanation (or no translation is available).

Consideration of the appropriate paragraph(s) indicated below is respectfully requested:

WITHIN THREE MONTHS OF FILING: Under § 1.97(b)(1), this information disclosure statement is being filed within three months of the filing date of the application. Although it is believed no fee is necessary, any deficiency in fees should be charged to Deposit Account No. 24-0037.

BEFORE FIRST OFFICE ACTION: Under § 1.97(b)(3), this information disclosure statement is being filed before the mailing date of a first Office Action on the merits. Although it is believed no fee is necessary, any deficiency in fees should be charged to Deposit Account No. 24-0037.

BEFORE FINAL ACTION/WITH FEE: Under § 1.97(c)(2), this information shall be considered if filed before the mailing date of a final action if accompanied by a fee in the amount of \$ as required by §1.17(p). The required fees should be charged to Deposit Account No. 24-0037.

INTERNATIONAL SEARCH REPORT: Under § 1.97(e)(1), the undersigned certifies that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement. Although it is believed no fee is necessary, any deficiency in fees should be charged to Deposit Account No. 24-0037.

Respectfully submitted,

FAY, SHARPE, FAGAN,
MINNICH & McKEE, LLP



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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT(S) <i>(Use as many sheets as necessary)</i>		Atty. Docket No.: D/A2247I XERZ 2 00563-3	Application No.: Unknown	
		First Named Inventor: Richard H. Bruce, et al.		
		Filing Date: Herewith	Examiner: N/A	Group: N/A

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.	Document No.	Issue/Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	4,600,951	July 15, 1986	Blitchington	
	AB	4,849,645	July 18, 1989	Mendenko et al.	
	AC	4,875,780	October 24, 1989	Moran et al.	
	AD	4,941,309	July 17, 1990	Masaharu et al.	
	AE	5,017,798	May 21, 1991	Murakami et al.	
	AF	5,216,485	June 1, 1993	Bird et al.	
	AG	5,471,066	November 28, 1995	Hagiwara	
	AH	5,627,365	May, 6, 1997	Chiba et al.	
	AI	5,640,246	June 17, 1997	Castonguay	
	AJ	5,798,831	August 25, 1998	Hagiwara	
	AK	US2002/0186368 A1	December 12, 2002	Rosengaus et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.	Foreign Patent Document	Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ?
		Country Code & Country Number				
AL	JP4296642	✓	21OC1992			
AM	JP6148085	✓	27MY1994			
AN	JP H9-145631	✓	06JE1997			
AO						

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ?
	AP	BIANCHI, Diana W., et al., Fetomaternal Cellular and Plasma DNA Trafficking, The Yin and the Yang, <i>Annals New York Academy of Sciences</i> , pp. 119-131	✓
	AQ	WOLFE, Josh, A Thousand Dots of Light, <i>Forbes/Wolfe Nanotech Report</i> , May 29, 2002, www.Forbes.com	✓
	AR	PERTL, Barbara, MD, et al., Fetal DNA in Maternal Plasma: Emerging Clinical Applications, <i>The American College of Obstetricians and Gynecologists</i> , Published by Elsevier Science Inc., Vol. 98, No. 3, September 2001, pp. 483-490	✓

Examiner Signature		Date Considered	
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Substitute for form 1449/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT(S) <i>(Use as many sheets as necessary)</i>		Atty. Docket No.: D/A2247 I XERZ 2 00563-3	Application No.: Unknown	
		First Named Inventor: Richard H. Bruce, et al.		
		Filing Date: Herewith	Examiner: N/A	Group: N/A

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Document No.	Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	BA	6,545,334 B2	04/08/2003	Verhaegen	
	BB	5,892,577	04/06/1999	Gordon	
	BC				

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Country Code & Country Number			
	BD				
	BE				
	BF				
	BG				

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T ?
	BH	BAUER, Kenneth D., et al., Reliable and Sensitive Analysis of Occult Bone Marrow Metastases Using Automated Cellular Imaging, <i>Clinical Cancer Research</i> , Vol. 6, pp. 3552-3559, September 2000			✓
	BI	WITZIG, Thomas E., et al., Detection of Circulating Cytokeratin-positive Cells in the Blood of Breast Cancer Patients Using Immunomagnetic Enrichment and Digital Microscopy, <i>Clinical Cancer Research</i> , Vol. 8, 1085-1091, May 2002			✓
	BJ	GHOSSEIN, R.A., et al., Molecular Detection and Characterisation of Circulating Tumour Cells and Micrometastases in Solid Tumours, <i>European Journal of Cancer</i> 36 (2000) 1681-1694, March 2000, Elsevier Science Ltd.			✓
	BK	FLATMARK, Kjersti, et al., Immunomagnetic Detection of Micrometastatic Cells in Bone Marrow of Colorectal Cancer Patients, <i>Clinical Cancer Research</i> , Vol. 8, 444-449, February 2002			✓
	BL	MÉHES, Gábor, et al., Quantitative Analysis of Disseminated Tumor Cells in the Bone Marrow by Automated Fluorescence Image Analysis, <i>Cytometry (Communications in Clinical Cytometry)</i> , 42:357-362 (2000, Wiley-Liss, Inc.			✓
	BM	WERTHER, M., et al., The Use of the CELLection Kit in the Isolation of Carcinoma Cells from Mononuclear Cell Suspensions, <i>Journal of Immunological Methods</i> , 238 (2000) 133-141, 2000 Elsevier Science B.V.			✓
	BN	BURCHILL, SA, et al., Comparison of the RNA-Amplification Based Methods RT-PCR and NASBA for the Detection of Circulating Tumour Cells, <i>2002 Cancer Research Campaign, British Journal of Cancer</i> (2002) 86, 102-109			✓

Examiner Signature	Date Considered
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